

Date: Wednesday, 19/11/2008 9:58:02 AM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	BEARING ASSEMBLY
<b>Job Number</b> :	43538		
<b>Estimate Number</b> :	11136		
<b>P.O. Number</b> :		<b>Part Number</b> :	D3183045
<b>This Issue</b> :	19/11/2008	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3183 REV C1
<b>First Issue</b> :	//	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	42179	<b>Drawing Revision</b> :	C1
	<b>Type</b> :	<b>Material</b> :	
	MACHINED PARTS	<b>Due Date</b> :	28/11/2008
<b>Written By</b> :		<b>Qty:</b>	100
<b>Checked &amp; Approved By</b> :	JUD 08.11.19	<b>Um:</b>	Each
<b>Comment</b> :	Est A04.02.18 New issue KJ/DS		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	MDELIRNR1000	Delrin Round Bar 1"
<b>Comment:</b> Qty.: 0.0350 f(s)/Unit Total : 3.4965 f(s) Delrin Round Bar 1" Material: Ø1.00 Delrin Rod (M-DELRIN-R1.000) Identify as D3183-9 Batch: <u>M108757</u> <u>JTP 08/11/22</u>		
2.0	HARDINGE	HARDINGE CNC LATHE SMALL
<b>Comment:</b> HARDINGE CNC LATHE SMALL Turn D3183-9 Cap as per Folio FA388 Deburr <u>JTP 08/11/22</u> (199)		
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
<b>Comment:</b> INSPECT PARTS AS THEY COME OFF MACHINE <u>JTP 08/11/22</u> (199)		
4.0	QC8	SECOND CHECK
<b>Comment:</b> SECOND CHECK <u>mk 08/11/24</u> (199)		
5.0	D31835	Bearing
<b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 100.0000 Each(s) Pick: Qty Part Number Description Batch 1 D3183-5 Bearing <u>B41045</u> (304) <u>B43552</u> (504) <u>B43608</u> (204)		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Wednesday, 19/11/2008 9:58:02 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARING ASSEMBLY

Job Number: 43538

Part Number: D3183045

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1  
Press D3183-5 Bearing into D3183-9 Cap as per Dwg D3183.

7.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

8.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 233A

9.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-11-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

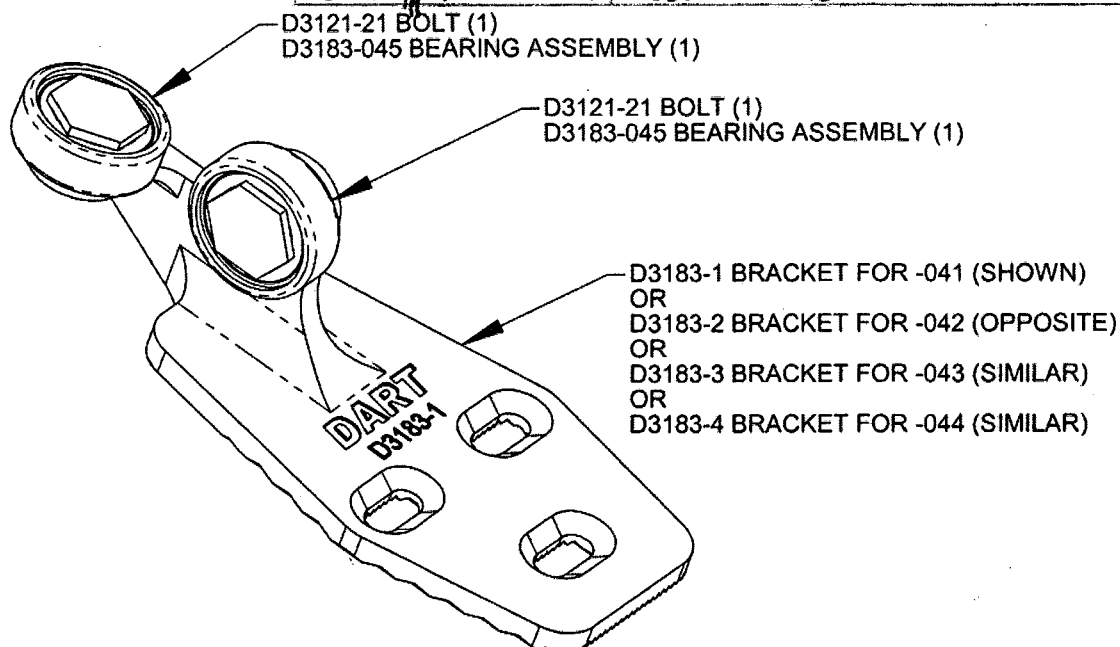
**NOTE:** Date & initial all entries



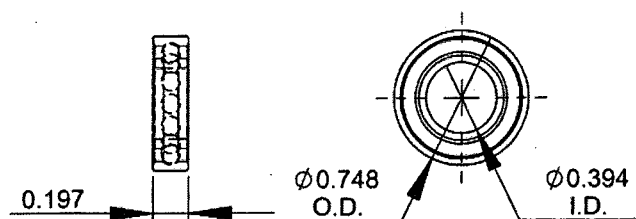


DESIGN #	DRAWN BY UP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. <b>D3183</b>	REV. C SHEET 1 OF 4
DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1
A.	03.01.24	NEW ISSUE	
B.	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C.	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED  
04.03.17



**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**



**D3183-5 BEARING:**  
**SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ COPY
- 3) ALL DIMENSIONS ARE IN INCHES

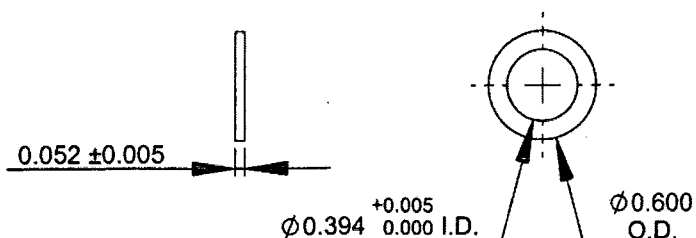
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WITHOUT NOTICE  
WORK ORDER

**D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES



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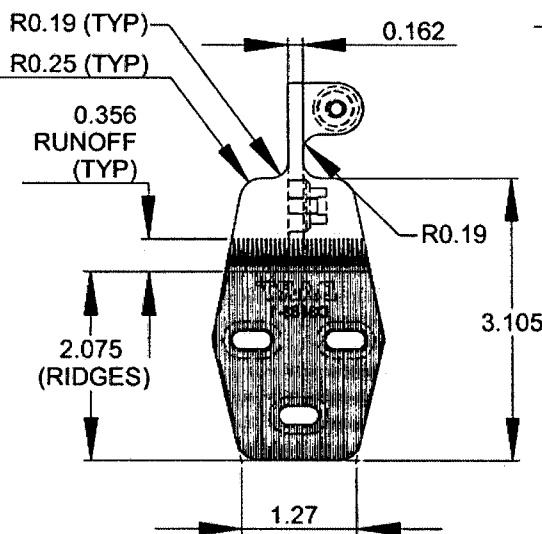
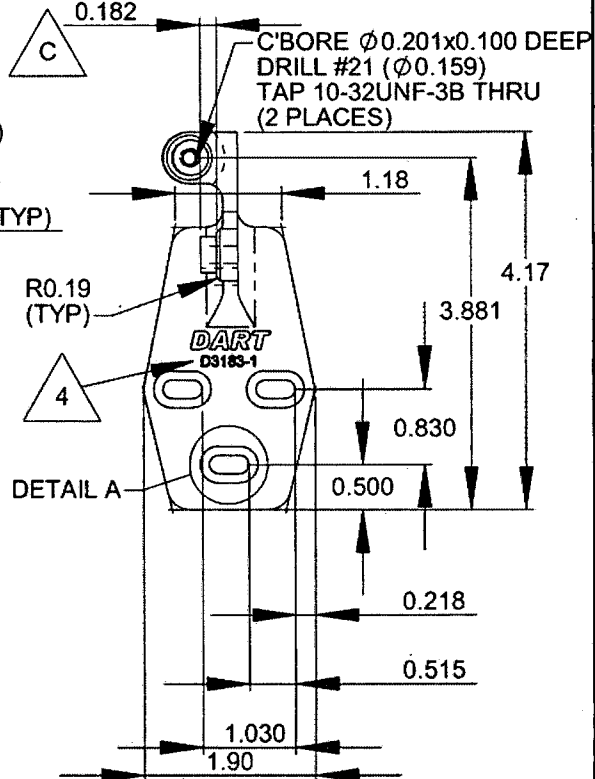
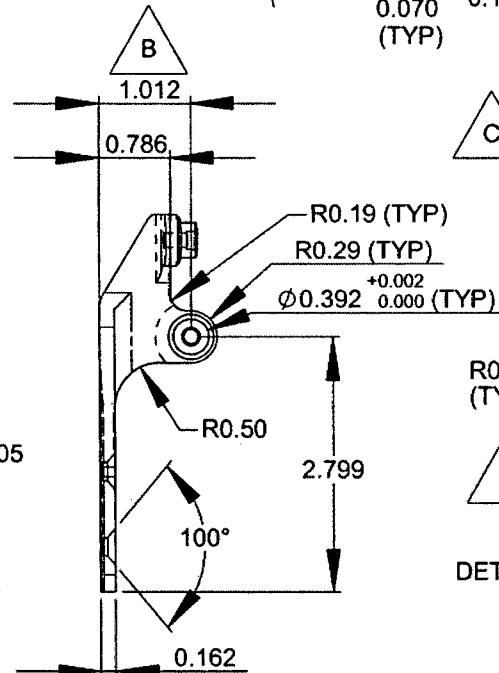
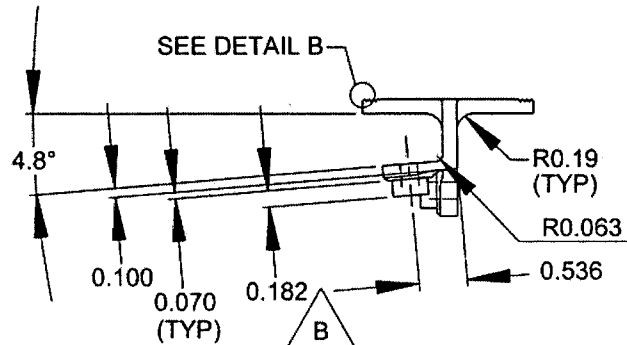
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**DART**

QA CONTROLLED

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CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	TITLE	REV. C
04.02.17	D3183	SHEET 2 OF 4
	BRACKET ASSEMBLY	SCALE 1:2

**RELEASED**  
04.03.01



**D3183-1 BRACKET SHOWN  
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

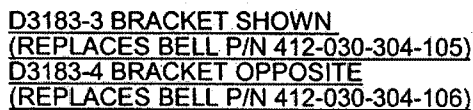
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		D3183	SHEET 3 OF 4
DATE	TITLE		SCALE
04.02.17	BRACKET ASSEMBLY		1:2



- 1) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE SPECIFIED
- 5) ALL DIMENSIONS ARE IN INCHES

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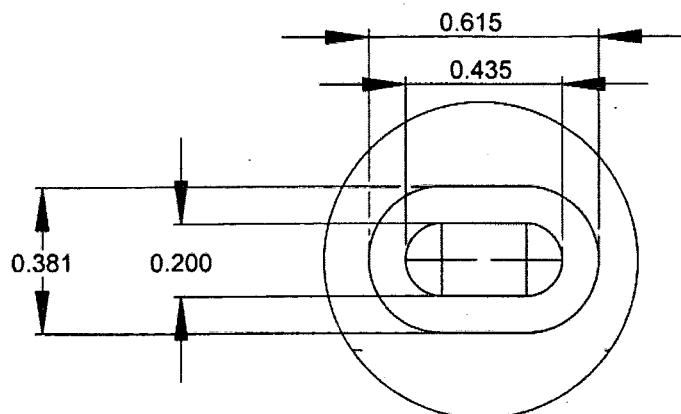
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24-33-01-#



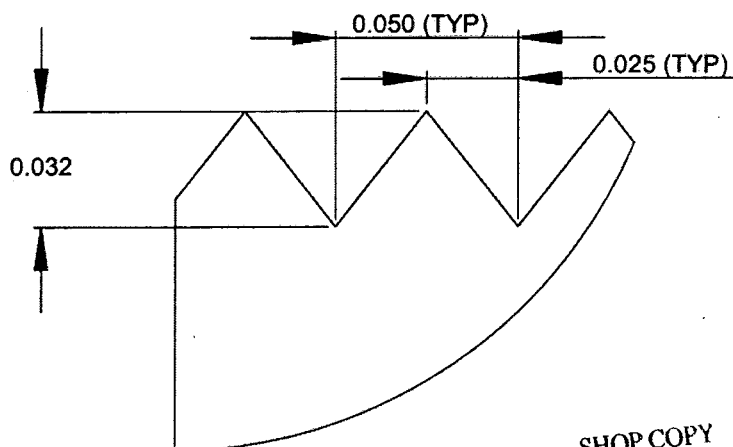


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DATE <b>04.02.17</b>	TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1	

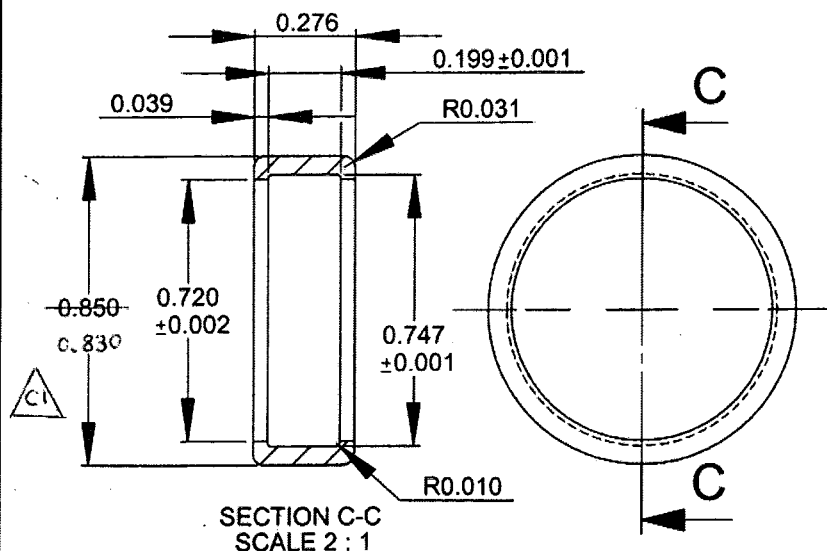


DETAIL A (2 : 1)

**RELEASED**  
04.03.01 #



DETAIL B (20 : 1)



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**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00  
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018  
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-045 BEARING ASSEMBLY**

- 1) ASSEMBLE D3183-5 BEARING AND  
D3183-9 CAP

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